

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of assessing speech quality transmitted via a packet based telecommunications network comprising the steps of:

storing a sequence of intercepted packets associated with a call, each packet containing

speech data, and

an indication of a transmission time of said intercepted packet;

storing with each intercepted packet an indication of an intercept time of said packet;

extracting a set of parameters from said sequence of intercepted packets; ~~and~~

generating an estimated mean opinion score in dependence upon said set of parameters; and

storing said estimated mean opinion score on a computer-readable medium accessible by a user for visualization and analysis.

wherein the extracting step comprises the sub steps of:

generating a jitter parameter for each packet of said sequence of stored packets in dependence upon

a difference between the transmission time of a stored packet and the transmission time of a preceding stored packet of the sequence; ~~and~~

a difference between the intercept time of said stored packet and the intercept time of said preceding stored packet;

generating a long term average jitter parameter (lt_jitter) for said stored packet in dependence upon the value of said jitter parameter (jitter) for said stored packet, ~~and~~ the value of said jitter parameter for any preceding stored packets, and a predetermined adaptation rate (P) according to the equation:

$lt_jitter = (lt_jitter * P) + (abs(jitter) * (1 - P));$ and

generating a differential jitter parameter in dependence upon the jitter parameter for said stored packet and the long term average jitter parameter.

2. (Previously Presented) A method according to claim 1, in which the extracting step further comprises the sub step of

generating a plurality of differential jitter parameters for a plurality of said stored packets;

determining a maximum value of said plurality of said differential jitter parameters.

3. (Previously Presented) A method according to claim 1, in which the extracting step further comprises the sub step of

generating a plurality of differential jitter parameters for a plurality of said stored packets;

determining a variance value of said plurality of said differential jitter parameters.

4. (Previously Presented) A method according to claim 2 in which the extracting step further comprises the sub steps of:

generating a plurality of maximum values for a plurality of sub-sequences of said stored packets;

determining an average for a sequence of said maximum values.

5. (Previously Presented) A method according to claim 3 in which the extracting step further comprises the sub steps of:

generating a plurality of variance values for a plurality of sub-sequences of said stored packets;

determining an average for a sequence of said variance values.

Claims 6-8 (Cancelled)

9. (Currently Amended) An apparatus for assessing speech quality transmitted via a packet based telecommunications network comprising:

means for storing a sequence of intercepted packets associated with a call, each packet containing

speech data, and

an indication of a transmission time of said packet;

means for storing with each intercepted packet an indication of an intercept time of said intercepted packet;

means for extracting a set of parameters from said sequence of intercepted packets; ~~and~~

means for generating an estimated mean opinion score in dependence upon said set of parameters; and

means for storing said estimated mean opinion score on a computer-readable medium accessible by a user for visualization and analysis.

wherein the means for extracting further comprises:

means for generating a jitter parameter for each intercepted packet of ~~a~~said sequence of stored intercepted packets in dependence upon

a difference between the transmission time of a stored intercepted packet and the transmission time of a preceding stored packet of the sequence;

and

a difference between the intercept time of said stored intercepted packet and the intercept time of said preceding stored intercepted packet;

means for generating a long term average jitter parameter (lt jitter) for said stored packet in dependence upon the value of said jitter parameter (jitter) for said stored intercepted packet, ~~and~~ the value of said jitter parameter for any

preceding stored intercepted packets and a predetermined adaptation rate (P) according to the equation: $lt_jitter = (lt_jitter * P) + (abs(jitter) * (1 - P))$; and means for generating a differential jitter parameter in dependence upon the jitter parameter for said stored intercepted packet and the long term average jitter parameter.